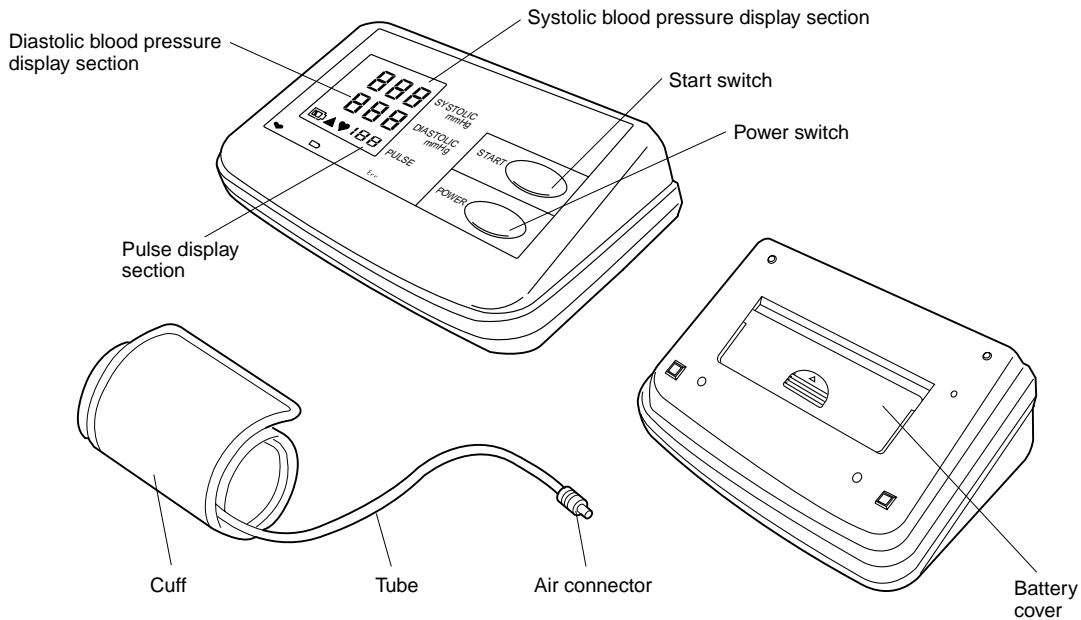


CITIZEN™

INSTRUCTION MANUAL FOR DIGITAL BLOOD PRESSURE MONITOR

REF CH-471B

IDENTIFICATION OF PARTS



SPECIFICATIONS

| | |
|--------------------------------------|--|
| Measuring method: | Oscillometric system |
| Indication: | Digital display, Height: 14.5mm |
| Measuring range: | Pressure; 0 ~ 280mmHg, Pulse; 40 ~ 180 beat/min. |
| Accuracy: | Pressure; ± 3 mmHg, Pulse; $\pm 5\%$ |
| Inflation: | Automatic inflation at suitable level by internal pump |
| Deflation: | Electromagnetic valve |
| Memory function: | 1 data |
| Power source: | 4 "AA" (LR6) Alkaline batteries |
| Battery life: | Approx. 700 times/LR6 (once a day, 170mmHg, room temp. 22°C) |
| Rated voltage: | 6V DC |
| Working temp. & humidity: | +10°C ~ +40°C, 30 to 85%RH |
| Storage temp. & humidity: | -20°C ~ +60°C, 10 to 95%RH |
| Outside dimensions: | 171mm(W) \times 125mm(D) \times 65mm(H) |
| Weight: | 440g (Apparatus and batteries) |
| Electric shock protection: | Type B equipment |
| Accessories: | Preformed Cuff, 4 "AA" (LR6) batteries, Instruction manual |

*Specifications and designs may be changed without notice in the event of improvements being made.

CLEANING METHOD OF CUFF

After cleaning the cuff with a neutral detergent, lightly rinse it with water and let it dry in the air. Hard rubbing or washing in a

washing machine will cause air leakage. Also, be careful not to get water into the air hose.

GENERAL REMARKS

General Remarks on blood pressure measurement

- If the cuff is to be deflated quickly, depress "POWER" switch.
- The attached cuff is suited for an arm circumference of 22cm to 32cm.
- When attaching the cuff, rubber cuff hose should be placed on the inside of your arm on top of the arterial.
- Self measurement is no therapy! In no case may you change the dosage of medication prescribed by your physician.
- In operation for blood pressure measurement, you should urinate and should remain relatively still for 10 to 15 minutes prior to measurement.
- Exercise, eating and drinking, smoking, etc., prior to measurement may affect the results.

- The blood pressure varies constantly throughout the day. Measurement should be made regularly at the same time each day.
- Do NOT be impressed by the results of one measurement. Keep a record of blood pressure variations. Many readings tell a story.
- Emotional stress may tend to cause pressure to rise.

For proper measurement of blood pressure

- Take a deep breath five or six times and then relax before measuring blood pressure. If you are tense when taking the measurement, you will not get a valid reading.

- Blood pressure will be elevated when you are in a worrisome or irritated state, suffering from lack of sleep or constipation, or after exercise or a meal.
- Putting on the cuff is one of the most important tasks for ensuring proper measurement of blood pressure. Wind the cuff around the arm and tighten it so that one finger may be inserted between the cuff and arm.
- Do NOT measure blood pressure after bathing or drinking.
- When you feel like relieving yourself, you should do so before measuring blood pressure.
- Measure blood pressure where the room temperature is about 20°C. Do NOT measure blood pressure when it is too cold (below 10°C) or too hot (above 40°C) in the room.
- Do NOT measure blood pressure immediately after drinking coffee or tea or smoking.
- Measure blood pressure with a relaxed and quiet posture. Keep the center of the cuff at the level of your heart, and do NOT move your arm or talk during measurement.
- Do NOT keep on measuring so many times, as your arm will have built up congestion of blood, and you will not get a valid reading.

PRECAUTION FOR USE AND MAINTENANCE

Precautions for use

- If you suffer from heart disease, high blood pressure or other circulatory disease, please consult your doctor first.
- If you feel abnormal pressure of the cuff during use or any other irregularity, reduce the pressure by immediately switching off the power or removing the batteries and consult the sales outlet where purchased.
- If you think the measured value is abnormal or if measuring makes you feel unwell, discontinue use and consult your doctor.
- Measurement of blood pressure may not be possible for someone with a weak pulse or arrhythmia.
- Congestion, swelling, etc. may occur in some people.
- If blood pressure is measured repeatedly, an accurate result will not be achieved. An interval of about 10 minutes should be allowed.
- The memory is erased if the batteries are removed for replacement, etc. and a record should be kept of any necessary data.

Precautions for maintenance

- Do NOT store the blood pressure monitor where it will be exposed to direct sunlight, high temperature (over 60°C), low temperature (below -20°C), high relative humidity (over 95%) or in a dusty place.
- Do NOT expose the blood pressure monitor to under force or vibration, or drop it.
- Remove the battery/batteries when not in use for a long period.
- Do NOT disassemble the apparatus.
- Do NOT bend the cuff or air hose unnecessarily.

- NEVER wipe the blood pressure monitor with thinner or benzene, as they may damage it.
- When the monitor is very dirty, wipe it clean with a cloth moistened with Sterilizing alcohol or a neutral detergent, and then wipe it with a dry cloth. Do NOT use thinner or benzene.

Nature and frequency of maintenance:

This products is designed for use over an extended period of time; however, it is generally recommended that it be inspected every two years to ensure proper function and performance.

Protect the nature environment:

Please help protect natural environment by respecting national and/or local recycling regulations when disposing of the batteries and the products at the end of their useful lives.

Reference European standard:

This products complies with EC instructions 93/42/EEC (Medical Device Directive) and with the following standards: EN 1060-1: 1995 "Noninvasive Sphygmomanometers, Part 1 General Requirements" and EN 1060-3: 1997 "Noninvasive Sphygmomanometers, Part 3 Supplementary Requirements for Electro-mechanical Blood-Pressure Measuring Systems.

Manufacturer:

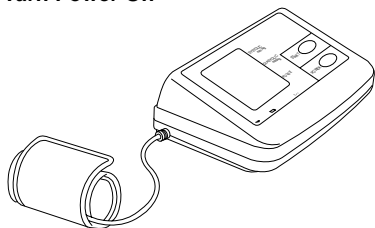
Name: Premier Precision Ltd.
 Address: Block E, G-H, 6th floor, Phase 2, Yip Fat
 Factory Building,
 73-75 Hoi Yuen Road, Kwun Tong, Kowloon,
 Hong Kong

European Representative:

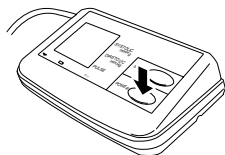
Name: WvW elektronische Geräte Vertrieb GmbH.
 Address: Robert-Koch-Straße 20, D-80538 München,
 GERMANY

CE
 0086

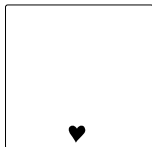
MEASUREMENTS

1. Turn Power On

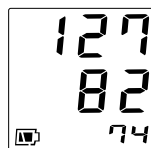
Insert the air connector from the cuff into the tube socket at the mainframe until it is tightly connected.



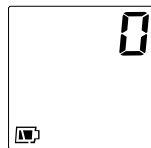
Press on the Power switch for power on.



If the Power switch is pressed, the mark of "♥" lights up and the buzzer sounds for one second.



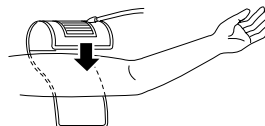
After the buzzer sounds, the last-measured systolic blood pressure, diastolic blood pressure and pulse are indicated for about 2 seconds.



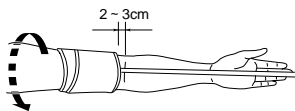
Then, the buzzer sounds three times at the interval of 100ms, and the meter is automatically set to the state to wait for pressurization.

2. Attaching of Arm Cuff and Posture During Measurement

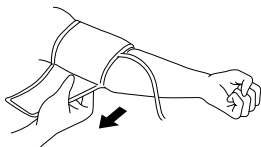
Unfasten and open the cuff as shown in the figure.



Wind the arm cuff around the left upper arm tightly so that bottom edge of the cuff is positioned about 2 – 3 cm above the elbow joint.



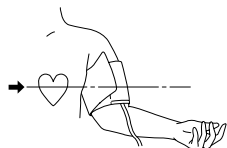
- When you will wind the cuff, please wind the cuff next to the skin if possible.
(If measurement is made by rolling the shirts or jacket up over the arm, this will constrict the upper arm and prevent accurate measurement.)



- Rubber cuff hose should be placed on the inside of your arm on top of the artery as figure.



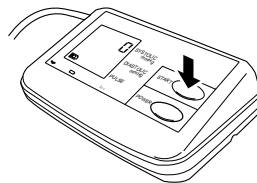
- Please make sure that the cuff is fastened tightly. Note that uneven cuff winding will prevent proper measurement.



Rest the elbow on a table so that the section of the upper arm is at the height of the heart. Relax the lower arm across the table and remain still, since movement - artifacts may falsify the measuring result.

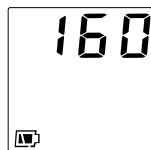
Make measurements in either a seated or reclining posture with the palm turned upward.

3. To Start the Measurement



Press the "START Switch".

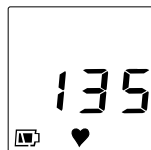
The arm cuff pressurizes when "START Switch" is pressed.



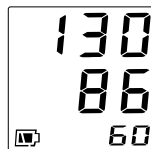
After the "START Switch" is pressed, the pressure is automatically heightened to the level for measurement of the blood pressure.



When the pressure lowers by 15mmHg after pressurization stops, the mark of "♥" lights up.



If the pulse is recognized, the pressure is shifted to the diastolic blood pressure display section and changed over, synchronized with the pulse.

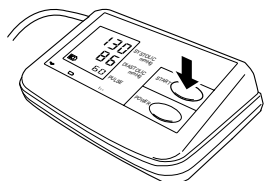


The buzzer sounds for two seconds, then the systolic blood pressure, diastolic blood pressure and pulse are indicated and the air is discharged. The measured data are registered automatically, as long as they are not error.

4. Turn Power OFF

Press the "POWER Switch" to turn off.

5. Subsequent Measurement




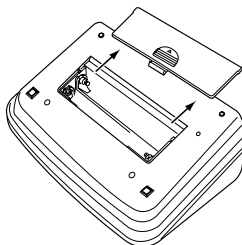
When a measurement need to be made again, the time between two measurements must be at least ten minutes.

6. Automatic Power OFF Function




If this is left on after measurement an "Automatic Power OFF Function" turns the power off after approximately 3 minutes. To continue measurement press the "POWER Switch" turning the units on.


7. Battery Replacement

If the batteries become weak, the "  " mark will appear in the display, indicating that batteries should be replaced with new one. Dispose of the dead batteries properly to preserve the environment.

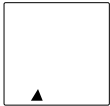


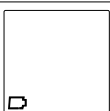
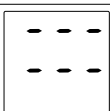


Remove the battery cover at mainframe and replace the four pieces of batteries.
Type "AA" battery or equivalent is suitable for this blood pressure monitor.

| | |
|---|---|
|  | Batteries are dead. |
|  | Battery will be dead soon. This is rough indication and dispersed, depending on batteries. |
|  | Batteries are normal. |

* Depending on the battery,  may not be on the display.

DESCRIPTION OF DISPLAY MARKS

| DISPLAY MARK | CONDITION/CAUSE | CORRECTIVE ACTION |
|---|--|--|
|  | Measurement is begun, but the pressure was insufficient. | Repeat measurement again. |
|  | Appears when the blood pressure could not be measured accurately. (Some noises were detected by the movement of arm during measurement.) | Repeat measurement again. First, exhaust air from the cuff, reapply the cuff properly and remeasure. Repeat measurement again. |
|  | Appears when the pulse could not be measured. | |
|  | Appears when the batteries become weak. | Replace the batteries. |
|  | Device has a trouble. | Ask purchased shop. |

●CITIZEN is a registered trademark of Citizen Watch Co., Japan.

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